

ABSTRACT OF THE DISCLOSURE

A nozzle for an injection molding apparatus is provided. The injection molding apparatus includes a manifold and a mold component. The manifold has at least one runner therein that is downstream from a melt source. The mold component defines at least one mold cavity and defining a gate into each mold cavity. The gate defines an axis. The mold component has a mold component alignment surface thereon. The nozzle includes a nozzle body, a tip, a tip surrounding piece and an alignment piece. The nozzle body defines a nozzle body melt passage, which is adapted to be in fluid communication and downstream from the at least one runner. The tip is removably connected to the nozzle body. The tip defines a tip melt passage therethrough. The tip melt passage is downstream from and in fluid communication with the nozzle body melt passage, and is upstream from and in fluid communication with the gate. The tip surrounding piece is removably connected with respect to the nozzle body. The alignment piece is positioned between the tip and the tip surrounding piece. The tip contacts the alignment piece to align the tip with respect to the alignment piece. The alignment piece contacts the tip surrounding piece to align the alignment piece with respect to the tip surrounding piece. The tip surrounding piece is adapted to contact the mold component to align the tip surrounding piece with respect to the gate, so that the tip is aligned with respect to the gate. The contact between the tip, the alignment piece, the tip surrounding piece and the mold component is adapted to be axially proximate the gate.